



## Research Data Alliance

Ross Wilkinson

Introduction

Oct 1<sup>st</sup>, 2012

# What data environment is needed for:

- Understanding where and how to build in bushfire prone areas
- Understanding the largest living thing in Australia – the Great Barrier Reef
- The effective use of Australia's soil
- and much more...



# What is the best response to a rise in health cost associated with an aging population?

- Who will find the answers?
  - Economists, medical researchers, genetic researchers, marketers, fine arts, psychologists, workforce analysts
- They need to communicate their answers to policy makers and industry
- But they have no common language, no shared data, no means of sharing through data

# How could the world adapt to a warmer climate?

- Who will find the answers?
  - Oceanographers, astronomers, glaciologists, meteorologists, language modellers, historians, climate modellers, entymologists, social scientists, architects, social scientists
- But they have no common language, no shared data, no means of sharing through data.



# Current Research Data Infrastructure:

- National
- Disciplinary
- Inter-disciplinary

There is an opportunity

- Increased data cooperation and availability
- Increased data capture

There is a gap

- An international forum for data interchange<sub>5</sub>

# International Data Cooperation Need

- Beyond disciplines
- Beyond countries
- Beyond institutions

## Two Responses:

- From data infrastructure practitioners: DAITF
- From NSF/EC/AU/CA/Go8+: DWF

Common purpose, and seeking alignment

## DAITF:

- Data practitioners recognised a need
- Have investigated practical steps
- More on content than governance
- *Mood of “getting on with it”*



## Research Data Alliance:

- Driven by Funding Agencies
- Responding to very broad need
- Inspired by IETF and SGIP
- Desire for practitioner “ownership” and agency “guidance”
- Providing a layer of governance on top of content
- *Mood of “getting on with it”*



# Research Data Alliance:

## ■ Vision:

- Researchers around the world sharing and using data without barriers

## ■ Purpose:

- The purpose of the Research Data Alliance (RDA) is to accelerate international data-driven innovation and discovery by facilitating research data sharing and exchange, use and re-use, standards harmonization, and discoverability. This will be achieved through the development and adoption of infrastructure, policy, practice, standards, and other deliverables.

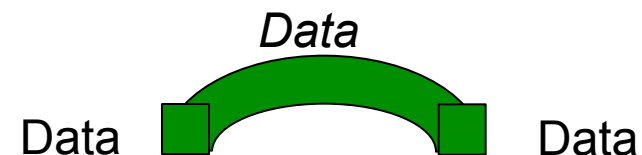
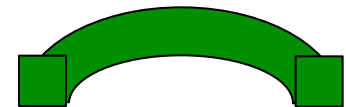
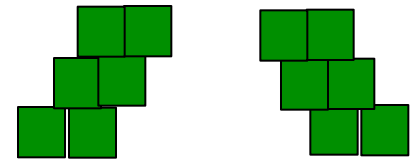
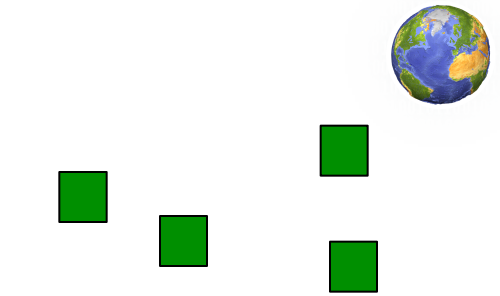
# Research Data Alliance:

What does “*getting on with it*” mean?

- Developing the building blocks
- Building data bridges

which

- Requires rough consensus
- Data exchange (equivalent of “running code”)

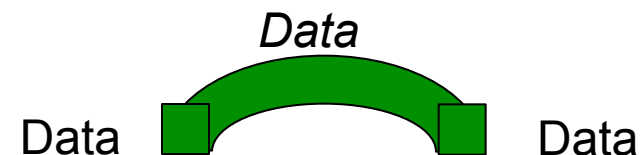
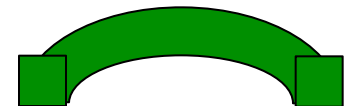
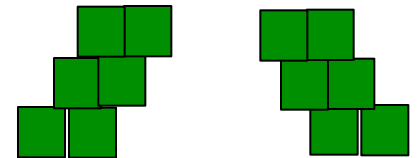
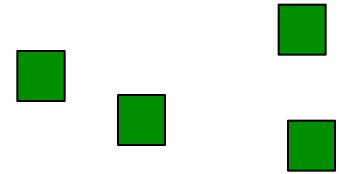




# Research Data Alliance:

What sort of bridges?

- Bridges to the future – data preservation
- Bridges to research partners
- Bridges across disciplines
- Bridges across regions
- Bridges to integration – to solve new problems





# Research Data Alliance Principles

- **Openness**
- **Balance** – between individual organizations and stakeholder communities;
- **Consensus** – á là IETF
- **Harmonization** –across standards, policies, technologies, tools
- **Voluntary**
- **Non-profit**



Plenary

Council

Secretariat

NGS

NGS

NGS

Govt  
Agency

Govt  
Agency

Govt  
Agency

Linguistics?

Data  
Working  
Group

Marine?

Data  
Working  
Group

Registries?

Data  
Working  
Group



# RDA Status

- Supported by early starters:
  - US (NSF) has established NGS participation
  - EC has established NGS participation – iCORDI
  - AU (DISSRTE) has established NGS participation – ANDS as NGS
  - Canada – in principle
  - Others have expressed interest
- Go8 – agreed in principle

# RDA – Draft Timeline

## Agency Planning Stage

Complete RDA white paper;  
Convene Agency Working Group  
Identify RDA-NGS and transfer initial funds  
Identify Steering Committee members and convene

May 2012  
Finish white  
paper

June 2012  
Convene Agency  
W/G

July 2012 Identify &  
convene Steering  
Committee

On or before Sep.  
1, 2012:  
Initial funds to NGS

## Start-up Planning

Produce RDA bylaws and charter;  
iNomCommittee and iCouncil  
Set-up secretariat

September  
2012

## Initial Launch

Review RDA bylaws and charter;  
Designate stakeholder groups;  
Identify initial DWGs

November  
2012

Inaugural Meeting  
March  
2013

## Transition Continuing Operation

Nominate Council (for 3 years mandate)

January  
2014

# Possible Interactions in Marine Data

- Requires chemists, physicists, biologists, climatologists....
- Leverage Marine vocabulary management – ODIP?
- Test interoperability between oceans, atmospheric and terrestrial data, and climate models
- Test data provenance exchange across the disciplinary boundaries in climate – work of SCIDIP-ES?
- Test sharing “data services” rather than “data” – IMOS
- International data registry services





## Issues for You:

- Does the Research Alliance make sense
- Do you have issues with this approach?
- Could you be involved in a building block?
- Could you help establish a bridge?
- How long would it take?
- Who else should be involved?
- Anything else?

Thank you

Let's Discuss